

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 09/575,580C

Source: 1FW/6

Date Processed by STIC: 7/17/06

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/575,580C

DATE: 07/17/2006

TIME: 09:07:27

Input Set : A:\HNV-4801.txt

Output Set : N:\CRF4\07172006\I575580C.raw

3 <110> APPLICANT: McKeon, F.  
 4 Kayako, K.  
 5 Ryeom, S.  
 7 <120> TITLE OF INVENTION: CALCIPRESSINS: ENDOGENOUS INHIBITORS OF CALCINEURIN,  
 8 USES AND REAGENTS RELATED THERETO  
 10 <130> FILE REFERENCE: HNV-048.01  
 13 <140> CURRENT APPLICATION NUMBER: 09/575,580C  
 14 <141> CURRENT FILING DATE: 2000-05-22  
 16 <150> PRIOR APPLICATION NUMBER: 60/135,431  
 17 <151> PRIOR FILING DATE: 1999-05-21  
 19 <150> PRIOR APPLICATION NUMBER: 60/161,195  
 20 <151> PRIOR FILING DATE: 1999-10-22  
 22 <160> NUMBER OF SEQ ID NOS: 49  
 24 <170> SOFTWARE: PatentIn Ver. 2.1  
 26 <210> SEQ ID NO: 1  
 27 <211> LENGTH: 2484  
 28 <212> TYPE: DNA  
 29 <213> ORGANISM: Homo sapiens  
 31 <400> SEQUENCE: 1  
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 33 aaccgtgcac atggcaagtt ctgaataaat ctcagctggt ggatataact tttgttataa 120  
 34 ttactaacac ttcctaacta gagagtaagc ctactctaag aaaaaatata actgtaattt 180  
 35 cacaacctcc aaagaaccca gtgcataaac agctaccatt tattaagcac tgactgaatt 240  
 36 cttagtaata tgtcttcatt tttttcagat gaggaaacta agattcagct tatttgtaaa 300  
 37 agtagttaaa aagcaaagct gaaattcaga cccaagttct cactgtatca tactgtccaa 360  
 38 aaaagaattc tatttttcag gaagagacat gtctgtcac ttgaggtcct cttatttttc 420  
 39 cgctattccc caaaggaaag ggggtgatct ttaattcttt cgttatgtcc tattgtacat 480  
 40 agcatataat ggtaattcag aaaaattact tctaattaca taaattttca caatggtata 540  
 41 gtgactaata cgctgaaata gaaaagtaag gcattgttat catggtctag ttcagtcttt 600  
 42 attgcgacta tatctgataa tatacggtaa gcactaacc acttgccagg gccacagag 660  
 43 ccacagggag actatgtctc gcttaaattc ccaaaagtgg gccctgtgc ttcaaaacgt 720  
 44 ccccgcatgg gaaccacaaa aacgttgctc cccagttat cacccttatt cacccttatt 780  
 45 cgaggactct gcccggcgtc cttcagctgg caccagctgt cagaaaagcg gaactgggga 840  
 46 cgaggacttt gcccttaacc aacatggcgg ccctgaggct tcgggcttcg ggccgagaa 900  
 47 ggaaggtcac gtgaagagaa ttccgttctt ttattggccc cgtctcctgg aagggcgagg 960  
 48 tacaataacc caaccggcgc cggccttaaa ggggccaccg ttggatctgc cgggtggcgg 1020  
 49 ccctaggggc tgggggggag gtcgcccgcg cgggcttctg cccctcccgc gcggaacggt 1080  
 50 gacggggcgg gctggcgctg ggaggccgtg tcgctgggag actgctgaca gcccgccgcc 1140  
 51 tgccgcgcgc cgattccgag ggggttaacg gcggagccgc cggccggggc cggaccggag 1200  
 52 cgcgtgaggc tccggcgcg cagcccggag cagcccgtg gggcgccagc ggtcgcgcg 1260  
 53 gcgcggggat ggaggacggc gtggccgggc cccagctcgg ggcgcggggc gagggcgcg 1320  
 54 aggcggccga ggcgcgagcg cggcccgggg tgacgctcgg gcccttcgcg cccctctcgg 1380  
 55 gggcgggcca ggcggacgag ggcggcgggc actggagctt cattgactgc gagatggagg 1440

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56 aggtggacct gcaggacctg cccagcgcca ccatcgctg tcacctggac ccgcgcgtgt 1500
57 tcgtggacgg cctgtgccgg gtgaggaccg cgccggggcg gccgtcgggg cggagggcg 1560
58 acacttggtt cccgaggagg cggcgcggtt cgcagcgccc agtcccggcc gcgcgcgggg 1620
59 cggggaggca gcgacgtccc ccgggctgct cggccgcgga cccgtcaggg ctggggcggt 1680
60 gggacggcgc cccgagggtc ccgggtccct agcaccccc gggcgcgcg agctcactgc 1740
61 agagtccac aggtcgcgcc cggccccct gtgcgcccag gctggtgcga ctagggggg 1800
62 gaattcgctc cccaaggtgg ggcagcgccg ccgccccctg cgctctcgcc atcgccccgc 1860
63 atttactcgc tggaggaggg ggtcacctca ttcttaggga ggaggaaaca gacattgagc 1920
64 ggcgacgtga ctcagtgttc ataaatagga cgacgtccct gcattcccaa tctgcactat 1980
65 tggaaagaaa gccaatgttt gggtagggat ccgtgggttc tcattagcca gcggtggcc 2040
66 agttttggtg gaattgtgtt ggggggaagg ggaccatctt tcagaccttt aggatattta 2100
67 gtcaagaacc ttgccccctt gtgtgaagg gtggcttgcc gccatcgggg acaccagta 2160
68 catggggagt cgactccttc cccgcctcc cccaccccc gcaaaatcca cacaatttag 2220
69 acactttgga gggtaggggg caggtatgag taatcaataa tgggtgggg gaggaagaat 2280
70 ttatttcaaa tctgcagtta ttgtgcagaa taaaatgtgg acaacgtgg cgtcacagaa 2340
71 tgaaccgggt ctttgagaga tgccccatta ggagagcagc tgtcaaaaaa agcagtgtt 2400
72 tcagcgcttg gctgtgggtc cacaatgct gtcaatgaac tatagttgaa ggctgctgcc 2460
73 aatacaacac cactgtgaaa caga 2484

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76 &lt;210&gt; SEQ ID NO: 2

77 &lt;211&gt; LENGTH: 597

78 &lt;212&gt; TYPE: DNA

79 &lt;213&gt; ORGANISM: Mus musculus

81 &lt;400&gt; SEQUENCE: 2

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82 atggaggagg tggatctgca ggacctgccg agcgccacca tcgcctgcca cctggaccgg 60
83 cgcgtgttcg tggacggcct gtgccggggc aaatttgaat ccctcttcag aacatatgac 120
84 aaggacacca ccttcagta ttttaagagc ttcaaactgt tccggataaa cttcagcaac 180
85 cccttatctg cagccgatgc caggctgcgg ctgcacaaga ccgagttcct ggggaaggaa 240
86 atgaagttgt attttgcctc gactttacac ataggaagtt cacacctggc tccgccaat 300
87 cccgacaaac agttcctcat ctccccctcg gcctctcttc ccgttggtg gaaacaagta 360
88 gaagatgcca ccccgctcat aaattacgat cttttatatg ccactctcaa gctggggcca 420
89 ggagagaagt atgaactgca tgcagcgaca gacccactc ccagtgtggt ggtccacgtg 480
90 tgtgagagtg accaagagaa tgaggaggaa gaggaagaga tggagagaat gaagagacc 540
91 aagcccaaaa tcatccagac acggagaccg gactacacac cgatccacct tagctga 597

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94 &lt;210&gt; SEQ ID NO: 3

95 &lt;211&gt; LENGTH: 729

96 &lt;212&gt; TYPE: DNA

97 &lt;213&gt; ORGANISM: Mus musculus

99 &lt;400&gt; SEQUENCE: 3

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100 gaattcgctg acccagcgt ccgcccacgc gtccgcttg ggcagcaggc atctatccct 60
101 gaagatgggg gacttttctt cctctgctgc atagacagag actgggctgt cactcagtgt 120
102 ttgtctgaag aggccttcca agcactcact gacttcagt atctcccaa ctcattgttt 180
103 gcctgcaatg ttcaccagtc tgtgtttgaa gaagaggaga gcaaggaaaa attcgaggga 240
104 ctgttcggga cctatgatga atgtgtgacg ttccagctgt ttaagagttt ccgacgggtt 300
105 cgaataaatt tcagccatcc caaatctgca gccctgccc ggatagagct tcatgagact 360
106 cagttcagag ggaagaagct acccctctac ttcgcccagg tccagacccc agagacagat 420
107 ggagacaaac tgcatttggc acctccacag cctgccaac agttcctcat ctacccccct 480
108 tcatctccat ctgttggtg gaagcctatc agcgatgcca caccagtct cactatgac 540
109 cttctttatg ctgtggccaa actaggacca ggagagaaat atgagctgca cgctggaact 600
110 gagtctaccc cgagcgtcgt ggtgcatgtg tgtgacagcg acatggagag ggaggaggac 660

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111 ccaaagactt ccccaaagcc aaaaatcaat cagacccggc ggctggcct gccacccttc 720
112 ggctactga 729
115 <210> SEQ ID NO: 4
116 <211> LENGTH: 198
117 <212> TYPE: PRT
118 <213> ORGANISM: Mus musculus
120 <400> SEQUENCE: 4
121 Met Glu Glu Val Asp Leu Gln Asp Leu Pro Ser Ala Thr Ile Ala Cys
122 1 5 10 15
124 His Leu Asp Pro Arg Val Phe Val Asp Gly Leu Cys Arg Ala Lys Phe
125 20 25 30
127 Glu Ser Leu Phe Arg Thr Tyr Asp Lys Asp Thr Thr Phe Gln Tyr Phe
128 35 40 45
130 Lys Ser Phe Lys Arg Val Arg Ile Asn Phe Ser Asn Pro Leu Ser Ala
131 50 55 60
133 Ala Asp Ala Arg Leu Arg Leu His Lys Thr Glu Phe Leu Gly Lys Glu
134 65 70 75 80
136 Met Lys Leu Tyr Phe Ala Gln Thr Leu His Ile Gly Ser Ser His Leu
137 85 90 95
139 Ala Pro Pro Asn Pro Asp Lys Gln Phe Leu Ile Ser Pro Pro Ala Ser
140 100 105 110
142 Pro Pro Val Gly Trp Lys Gln Val Glu Asp Ala Thr Pro Val Ile Asn
143 115 120 125
145 Tyr Asp Leu Leu Tyr Ala Ile Ser Lys Leu Gly Pro Gly Glu Lys Tyr
146 130 135 140
148 Glu Leu His Ala Ala Thr Asp Pro Thr Pro Ser Val Val Val His Val
149 145 150 155 160
151 Cys Glu Ser Asp Gln Glu Asn Glu Glu Glu Glu Glu Met Glu Arg
152 165 170 175
154 Met Lys Arg Pro Lys Pro Lys Ile Ile Gln Thr Arg Arg Pro Glu Tyr
155 180 185 190
157 Thr Pro Ile His Leu Ser
158 195
161 <210> SEQ ID NO: 5
162 <211> LENGTH: 242
163 <212> TYPE: PRT
164 <213> ORGANISM: Mus musculus
166 <400> SEQUENCE: 5
167 Glu Phe Val Asp Pro Arg Val Arg Pro Arg Val Arg Leu Gly Gln Gln
168 1 5 10 15
170 Ala Ser Ile Pro Glu Asp Gly Gly Leu Phe Phe Leu Cys Cys Ile Asp
171 20 25 30
173 Arg Asp Trp Ala Val Thr Gln Cys Phe Ala Glu Glu Ala Phe Gln Ala
174 35 40 45
176 Leu Thr Asp Phe Ser Asp Leu Pro Asn Ser Leu Phe Ala Cys Asn Val
177 50 55 60
179 His Gln Ser Val Phe Glu Glu Glu Glu Ser Lys Glu Lys Phe Glu Gly
180 65 70 75 80
182 Leu Phe Arg Thr Tyr Asp Glu Cys Val Thr Phe Gln Leu Phe Lys Ser

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183          85          90          95
185 Phe Arg Arg Val Arg Ile Asn Phe Ser His Pro Lys Ser Ala Ala Arg
186          100          105          110
188 Ala Arg Ile Glu Leu His Glu Thr Gln Phe Arg Gly Lys Lys Leu Pro
189          115          120          125
191 Leu Tyr Phe Ala Gln Val Gln Thr Pro Glu Thr Asp Gly Asp Lys Leu
192          130          135          140
194 His Leu Ala Pro Pro Gln Pro Ala Lys Gln Phe Leu Ile Ser Pro Pro
195 145          150          155          160
197 Ser Ser Pro Ser Val Gly Trp Lys Pro Ile Ser Asp Ala Thr Pro Val
198          165          170          175
200 Leu Asn Tyr Asp Leu Leu Tyr Ala Val Ala Lys Leu Gly Pro Gly Glu
201          180          185          190
203 Lys Tyr Glu Leu His Ala Gly Thr Glu Ser Thr Pro Ser Val Val Val
204          195          200          205
206 His Val Cys Asp Ser Asp Met Glu Arg Glu Glu Asp Pro Lys Thr Ser
207          210          215          220
209 Pro Lys Pro Lys Ile Asn Gln Thr Arg Arg Pro Gly Leu Pro Pro Phe
210 225          230          235          240
212 Gly His
216 <210> SEQ ID NO: 6
217 <211> LENGTH: 192
218 <212> TYPE: PRT
219 <213> ORGANISM: Homo sapiens
221 <400> SEQUENCE: 6
222 Met Asp Cys Asp Val Ser Thr Leu Val Ala Cys Val Val Asp Val Glu
223 1          5          10          15
225 Val Phe Thr Asn Gln Glu Val Lys Glu Lys Phe Glu Gly Leu Phe Arg
226          20          25          30
228 Thr Tyr Asp Asp Cys Val Thr Phe Gln Leu Phe Lys Ser Phe Arg Arg
229          35          40          45
231 Val Arg Ile Asn Phe Ser Asn Pro Lys Ser Ala Ala Arg Ala Arg Ile
232          50          55          60
234 Glu Leu His Glu Thr Gln Phe Arg Gly Lys Lys Leu Lys Leu Tyr Phe
235 65          70          75          80
237 Ala Gln Val Gln Thr Pro Glu Thr Asp Gly Asp Lys Leu His Leu Ala
238          85          90          95
240 Pro Pro Gln Pro Ala Lys Gln Phe Leu Ile Ser Pro Pro Ser Ser Pro
241          100          105          110
243 Pro Val Gly Trp Gln Pro Ile Asn Asp Ala Thr Pro Val Leu Asn Tyr
244          115          120          125
246 Asp Leu Leu Tyr Ala Val Ala Lys Leu Gly Pro Gly Glu Lys Tyr Glu
247          130          135          140
249 Leu His Ala Gly Thr Glu Ser Thr Pro Ser Val Val Val His Val Cys
250 145          150          155          160
252 Asp Ser Asp Ile Glu Glu Glu Glu Asp Pro Lys Thr Ser Pro Lys Pro
253          165          170          175
255 Lys Ile Ile Gln Thr Arg Arg Pro Gly Leu Pro Pro Ser Val Ser Asn
256          180          185          190

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Input Set : A:\HNV-4801.txt

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262 <210> SEQ ID NO: 7
263 <211> LENGTH: 170
264 <212> TYPE: PRT
265 <213> ORGANISM: Homo sapiens
267 <400> SEQUENCE: 7
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269   1           5           10           15
271 Ile Thr Phe Gln Tyr Phe Lys Ser Phe Lys Arg Val Arg Ile Asn Phe
272           20           25           30
274 Ser Asn Pro Phe Ser Ala Ala Asp Ala Arg Leu Gln Leu His Lys Thr
275           35           40           45
277 Glu Phe Leu Gly Lys Glu Met Lys Leu Tyr Phe Ala Gln Thr Leu His
278           50           55           60
280 Ile Gly Ser Ser His Leu Ala Pro Pro Asn Pro Asp Lys Gln Phe Leu
281           65           70           75           80
283 Ile Ser Pro Pro Ala Ser Pro Pro Val Gly Trp Lys Gln Val Glu Asp
284           85           90           95
286 Ala Thr Pro Val Ile Asn Tyr Asp Leu Leu Tyr Ala Ile Ser Lys Leu
287           100          105          110
289 Gly Pro Gly Glu Lys Tyr Glu Leu His Ala Ala Thr Asp Thr Thr Pro
290           115          120          125
292 Ser Val Val Val His Val Cys Glu Ser Asp Gln Glu Lys Glu Glu Glu
293           130          135          140
295 Glu Glu Met Glu Arg Met Arg Arg Pro Lys Pro Lys Ile Ile Gln Thr
296           145          150          155          160
298 Arg Arg Pro Glu Tyr Thr Pro Ile His Leu
299           165          170
302 <210> SEQ ID NO: 8
303 <211> LENGTH: 197
304 <212> TYPE: PRT
305 <213> ORGANISM: Cricetulus griseus
307 <400> SEQUENCE: 8
308 Met His Phe Arg Asp Phe Asn Tyr Asn Phe Ser Ser Leu Ile Ala Cys
309   1           5           10           15
311 Val Ala Asn Gly Asp Val Phe Ser Glu Ser Glu Thr Arg Ala Lys Phe
312           20           25           30
314 Glu Ser Leu Phe Arg Thr Tyr Asp Lys Asp Ile Thr Phe Gln Tyr Phe
315           35           40           45
317 Lys Ser Phe Lys Arg Val Arg Ile Asn Phe Ser Asn Pro Leu Ser Ala
318           50           55           60
320 Ala Asp Ala Arg Leu Gln Leu His Lys Thr Glu Phe Leu Gly Lys Glu
321           65           70           75           80
323 Met Lys Leu Tyr Phe Ala Gln Thr Leu His Ile Gly Ser Ser His Leu
324           85           90           95
326 Ala Pro Pro Asn Pro Asp Lys Gln Phe Leu Ile Ser Pro Pro Ala Ser
327           100          105          110
329 Pro Pro Val Gly Trp Lys Gln Val Glu Asp Ala Thr Pro Val Ile Asn
330           115          120          125
332 Tyr Asp Leu Leu Tyr Ala Ile Ser Lys Leu Gly Pro Gly Glu Lys Tyr

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/575,580C

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Input Set : A:\HNV-4801.txt  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:27; N Pos. 2410  
Seq#:28; Xaa Pos. 6  
Seq#:33; Xaa Pos. 1,2,3  
Seq#:46; Xaa Pos. 6  
Seq#:47; Xaa Pos. 4  
Seq#:48; Xaa Pos. 4

**VERIFICATION SUMMARY**

DATE: 07/17/2006

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Input Set : A:\HNV-4801.txt

Output Set: N:\CRF4\07172006\I575580C.raw

L:871 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:2400  
L:910 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0  
L:997 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0  
L:1386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0  
L:1405 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0  
L:1424 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0